

RENEWABLES COMMITTEE WORKSHOP
BEFORE THE
CALIFORNIA ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION

In the Matter of:)
) Docket No.
Proposed Changes to the New) 06-NSHP-1
Solar Homes Partnership)
Guidebook)
_____)

CALIFORNIA ENERGY COMMISSION
HEARING ROOM A
1516 NINTH STREET
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I N D E X

	Page
Proceedings	1
Introductions	1
Opening Remarks	1
Associate Member Pfannenstiel	1
Workshop Overview	1
Self-Proposed Guidebook	1
Program Status	2
Proposed Revisions to 12/06 Edition	6
Affordable Housing Provisions	
Other Revisions	
Timeline	14
Public Comment/Questions	15
Closing Remarks	60
Adjournment	66
Certificate of Reporter	67

P R O C E E D I N G S

2:05 p.m.

ASSOCIATE MEMBER PFANNENSTIEL: We're here today for a Renewables Committee workshop on the new Solar Homes Partnership.

I'm Commissioner Jackie Pfannenstiel, and I am actually not the Presiding Member of the Renewables Committee. Commissioner Geesman has that honor. But he has another honor today in that he's off doing a siting case. So we have me; we have Commissioner Geesman's Advisor Suzanne Korosec; and my Advisor Tim Tutt.

So, with that, why don't we give it to Sandy. Are you going to do the honors?

MR. MILLER: Thank you, Chairman.

(Pause.)

MR. MILLER: Thank you. I'm Sandy Miller; I work in the renewable energy program. And I'm going to walk you through a bunch of slides that were out on the table out here. So if you didn't get one when you came in, you can get one later on. They're also in Dockets also. So you can pick one up from Dockets, too.

Basically what I want to do is go through a number of topics here, basically the

1 status of the New Solar Homes Partnership.

2 We have a number of guidebook changes.
3 The primary changes that we have to the guidebook
4 are related to affordable housing. We have some
5 other guidebook changes which I'll take up after
6 going through the affordable housing changes.

7 We're going to talk a little bit about
8 the timeline of getting the guidebook adopted, and
9 issues and comments.

10 For those of you who were able to get an
11 agenda out there basically I'm going to be doing a
12 presentation on this stuff. We're going to have
13 comments after that. I think that's on the
14 agenda.

15 And we have people on the phone, also,
16 who can potentially provide some comments.

17 Okay, a little bit about the status of
18 the program. As many of you know, the program
19 guidebook, original guidebook, was adopted by the
20 Commission in December 2006. The program
21 officially started ready for applications January
22 2, 2007.

23 We also, at the same time, have some
24 marketing activities that got started. We have a
25 contractor, name of ProProse, that has been doing

1 some initial builder partnering. That started in
2 September -- or, I'm sorry, December, basically to
3 work with builders and get them acquainted with
4 the program.

5 We have a large contract with Edelman &
6 Associates that are doing some research work,
7 market research work on how to get the program
8 going.

9 The basic -- let's see, just a second
10 here -- NSHP status, I'm sorry. Okay. At the
11 beginning of the year we have a PV calculator, as
12 most of you know. The PV calculator is designed
13 to provide an estimate of the expected output of a
14 solar system, taking into account geographic tilt,
15 orientation factors, the type of module; and it
16 also provides an estimate of output. And this
17 basically uses what we call a time-dependent
18 valuation.

19 In January we had very few modules in
20 the calculator. As you can see, probably five,
21 maybe right around there. Today we have upwards
22 of 90 modules that are now on the PV calculator.
23 There are more that are anticipated to be added as
24 the various module manufacturers are getting their
25 modules tested to the specifications, and are

1 providing the data requirements that the model
2 uses in order to calculate the output.

3 There was an error in the PV calculator
4 early on. It was discovered. And that's been
5 fixed since February. And so we have the module
6 all done -- I mean the calculator all done; and we
7 have a substantial number of modules that are now
8 in the calculator.

9 Another program adjustment, I don't know
10 if you'd necessarily call it an adjustment so
11 much, but we have been working with the utilities
12 to try to get the utilities to work with the
13 Commission on the New Solar Homes Partnership to
14 provide incentives for new homes. It's basically
15 a new construction home incentive program where
16 they would provide some incentives for applicants
17 to meet either the 15 percent or the 35 percent
18 efficiency requirements over and above the Title
19 24.

20 A little bit on the outsourcing of the
21 program. Many of you know that what we have been
22 trying to do is work with the utilities to
23 eventually take over the task of program
24 administration.

25 So we've been working with the three

1 main IOUs on this to hand over the program
2 administration; negotiations are progressing with
3 those people. One point that you might note, the
4 middle point there is what we would like to do.
5 We would probably try to focus on what this
6 guidebook is, is basically replace the parts in
7 the guidebook that says Energy Commission with
8 program administrator.

9 So when we get to the point that we hand
10 off the administration of the program to the
11 utilities, we don't have to come back in and
12 necessarily change the guidebook for that. So
13 what we're hoping for is that this proposed
14 guidebook that hopefully gets adopted is good even
15 after it gets shifted over to the utilities.
16 Anticipated handoff to the utilities is fall 2007.

17 Program participation. To date we have
18 had 19 applications to the program. All of these
19 have been custom homes. We haven't had housing
20 developments coming in yet or affordable housing
21 applications yet. We're anticipating those.

22 On the applications to date the 19 it
23 has been ramping up slightly. Since the beginning
24 of May we've had nine applications. And so it is
25 showing some increase there.

1 Now I'd like to go through the guidebook
2 changes for affordable housing. These are some of
3 the basic issues that we went through with the
4 affordable housing committee. The affordable
5 housing committee basically was created at the
6 recommendation of the Commission, which would
7 comprise basic stakeholders from the affordable
8 housing area to provide some recommendations to
9 the Commission on what types of provisions and
10 incentives are necessary to get more affordable
11 housing participating into the program.

12 So, we basically went through
13 incentives, the issue of funding set-aside, mixed-
14 use developments, mixed use basically meaning
15 you've got some residential units that may be
16 combined with some commercial units potentially.

17 Efficiency requirements that are
18 required in the current guidebook. The issue of
19 maintenance; once a project gets built, a solar
20 system gets built what types of maintenance
21 requirements there should be; whether or not a
22 contract. Some metering issues and reservation
23 period.

24 So I'll go through these one at a time
25 here. The current guidebook, basically you can

1 kind of get an idea here. AB-58 basically
2 required the Commission to provide higher
3 incentives for affordable housing. And since
4 about 2003 we've been offering 25 percent higher
5 rebates. And that was through the old ERP.

6 That same percentage carried into the
7 NSHP, but at the same time there was recognition
8 by the Commission and encouragement by the
9 affordable housing people that we needed to
10 revisit that subject.

11 But the current guidebook basically
12 would have \$3.25 a Watt for -- that would be the
13 highest rebate; 3.13 for other applications, that
14 would be basically those not complying with a
15 development and 50 percent -- less than 50
16 percent.

17 We also didn't have a separate rebate
18 for individual units for common areas. They all
19 created the same. We also had incentive declines
20 tied to the other portions of the New Solar Homes
21 Partnership. So, when those megawatt volumes that
22 were in the original guidebook got filled up,
23 those incentive rates for the let's say single
24 family homes we put down, affordable housing would
25 go down, too. And also no funding set-aside.

1 And what we have here on the proposed --
2 and I think I want to step back here a little bit
3 and kind of give you a background of between the
4 current and proposed. A lot of these proposed
5 changes that we're showing here today were worked
6 out with the affordable housing committee.

7 And in the March 23rd committee workshop
8 the affordable housing committee unanimously
9 accepted these. Now what we have here is our
10 interpretation, and putting them in the guidebook
11 today. So we're hoping that we're still on the
12 same page as far as in unison with the affordable
13 housing committee on these.

14 So what we're seeing here as far as
15 proposed has the concurrence, we think, with the
16 affordable housing committee. And we can take
17 that up later when we have comments from them on
18 this.

19 On the proposed incentives, what we're
20 showing here is that we will have a separate
21 incentive for individual units and a lower
22 incentive for common areas. So it's 3.50 for
23 residential units, \$3.30 for common areas.

24 The incentives are still designed to
25 decline over time. But the distinction is that

1 there is a separate megawatt amount which is
2 basically 10 percent of the other new homes solar
3 megawatt amount. And so the incentives are tied
4 to that decline. I can get to that in a little
5 bit here.

6 So, it is a little bit separate. And
7 the affordable housing incentives are not going to
8 necessarily be tied lockstep with the other
9 incentives when they decline. There still is no
10 specific set-aside for the funding on that.

11 This gives you an idea; this is very
12 similar to the regular NSHP program. We're
13 starting, I just show one line here, but we
14 basically will have two. One is at 3.50 and one
15 is at 3.30. And they're basically going down the
16 same pattern over time.

17 And as it also shows, is as we get
18 further out into the forecast there's an
19 assumption that the volume and activity will pick
20 up. And so as solar becomes more accepted,
21 hopefully the prices start going down. There will
22 be less incentives required and more volume. And
23 it will become more common in affordable housing.

24 The issue of mixed use. The current
25 guidebook basically says that if it's a mixed use

1 development that they would not be eligible for
2 incentives. We have a proposal here basically
3 that it doesn't really matter if it's all
4 residential or part mixed use, the NSHP would fund
5 the residential portion of the mixed use.

6 Affordable housing efficiency
7 requirements. The current guidebook had the
8 minimum of 15 percent beyond Title 24 efficiency.
9 It also had the requirement that if solar was
10 going to be put on the common areas, that the
11 entire project must be 20 percent above Title 24.

12 The proposed change there would be to
13 strike the 20 percent above Title 24 on the common
14 area. So they just would have to achieve 15
15 percent Title 24 efficiency on the development.

16 As far as metering is concerned, the
17 original guidebook requires individual metering.
18 The proposal that the affordable housing people
19 thought would be more flexible is to allow
20 individual metering still, still require that, but
21 to allow nonutilities to own meters. And I think
22 they're looking at different options available
23 potentially to allow them to put systems in and
24 still be individually metered, but potentially try
25 to lower their overall costs. So the Commission

1 is okay with that proposal.

2 Affordable housing maintenance. The
3 current guidebook does not require a maintenance
4 contract. Our interpretation of the affordable
5 housing proposal would be that if you're going to
6 put a system in, or a large system, that there
7 should be some sort of a maintenance contract
8 required there to insure that the systems are
9 going to operate over their intended life.

10 Reservation period. We had in the
11 original guidebook 36 months. We didn't see a
12 change in that.

13 Other proposed changes. Now, these are
14 nonaffordable housing changes. The PUC had some
15 changes to its guidebook. In order to be
16 consistent and coordinated between the PUC's CSI
17 program and the NSHP program, we had to make a few
18 changes to make sure that we didn't have projects
19 falling through the cracks and not being eligible
20 for each one. Or at the same time having overlap
21 with any of their provisions.

22 So we're offering a new definition, not
23 a new definition, it's a clarification of new
24 residential basically. It basically says that
25 they have to -- that they don't have their

1 building permit final'd yet, and it would have to
2 be subject to the current Title 24 standards. Of
3 course, they have to meet the 15 percent above
4 that.

5 We're also proposing that mixed use be
6 also eligible for nonaffordable housing portions
7 of residential development, too. And that common
8 areas in these developments are also eligible if
9 they primarily serve the residences in that
10 development, the residential units.

11 Other proposed changes. The current
12 guidebook doesn't really have a lot of -- it
13 doesn't have any definitions of system ownership
14 in it. The intent from the Commission's
15 perspective, I think, is to try to make sure that
16 the systems remain in place.

17 So we want to have language in there
18 that allows for some flexibility in ownership,
19 like lease systems. This would be an area that we
20 feel that could be some comments, so we solicit
21 any comments that you may have on that subject.
22 But I think our intent is allow some flexibility
23 in the ownership aspect.

24 Other things in the guidebook. There
25 were some areas that just needed cleaning up as

1 far as language; that basically is that next
2 bullet there, clarification of guidebook
3 provisions. We're cleaning up the forms a little
4 bit to make the forms a little bit easier to
5 understand.

6 Another change that I don't have in the
7 PowerPoint presentation here is we're explicitly
8 allowing owner/builders to install their own
9 systems. This is consistent with the previous ERP
10 guidebook where owners could install their own
11 systems. We don't have any discount on the rebate
12 or anything like that, or the incentive level for
13 owner/builders in this regard.

14 On energy efficiency, when you look
15 through the guidebook there's a requirement in the
16 application, part of it that you're supposed to
17 provide energy efficiency documentation to show
18 that you're at least 15 percent above Title 24.

19 As I mentioned earlier, we want to work
20 with the utilities on the program here. And the
21 utilities have new home construction programs.
22 And PG&E has been the first utility that has put
23 into place incentives which are consistent with
24 the NSHP.

25 And what we want to do here is if the

1 applicant works with the utility and applies to
2 their new home construction program, then the
3 documentation for our program can be waived. All
4 that would be needed would be proof that they're
5 participating in the new home construction program
6 of those utilities.

7 The construction plan set has been
8 slightly redefined to make sure that any
9 documentation that's provided will enable us to
10 check to make sure that the applicants are meeting
11 the Title 24 plus 15 percent at least standards
12 there.

13 There's some proposed changes to the
14 appendices. Appendix 3 and appendix 4. They're
15 basically some clarifications and additional
16 information that the appendices require in order
17 to provide us with that additional information.

18 Some of this has to do with -- is
19 focused towards the PV module manufacturers. So
20 when they get a module listed and get put in our
21 PV calculator, they have basically a clearly
22 understanding basically of what they're supposed
23 to provide.

24 Timetable for the guidebook revisions.
25 Today's June 6th, of course. We were shooting for

1 July 3rd for a Commission business meeting. But I
2 understand that that may be -- there may not be a
3 quorum or something on July 3rd. So it may appear
4 that it could be moved to July 11th, which is a
5 week later.

6 So we would be posting the guidebook
7 back on the web probably around June 22nd, if it
8 was going to be for July 3rd. If it's going to be
9 July 11th, we'll probably do it a little bit
10 later.

11 Comments elicited. We're interested in
12 comments on the affordable housing provisions.
13 Other changes we've made into the guidebook,
14 timeline issues; written comments are due to
15 Dockets by 5:00 p.m. June 7th, which is tomorrow.

16 So, I think that'll do it for me. And I
17 think we're ready to move on to the next stage.

18 ASSOCIATE MEMBER PFANNENSTIEL: Thank
19 you, Sandy. Now we're ready to hear from
20 everybody out there. I have one blue card, and
21 there are, I believe, blue cards out on the table.
22 And you can get them to Sandy, perhaps, who can
23 bring them up to me.

24 Aaron Nitzkin.

25 MR. NITZKIN: Thank you very much.

1 Thank you for the opportunity to present some
2 comments on the New Solar Homes Partnership
3 guidebook. Over five months have passed since the
4 official launch of this program. And during this
5 period, you know, many of the stakeholders in this
6 room, including my company, Old Country Roofing,
7 have been out there working very hard to get this
8 program going.

9 By way of example, my company's
10 activities since the launch of this program
11 include creating tools and documents to help, as
12 much as possible, simplify this program, which is
13 somewhat complex, for builders.

14 Too, we've been providing free workshops
15 for builders to learn more about solar and energy
16 efficiency. And we have given presentations about
17 solar and energy efficiency firsthand to hundreds
18 of individual builder members and representatives.

19 We are collaborating with other
20 stakeholders and the industry to further the
21 education of builders about the New Solar Homes
22 Partnership. And we've been working jointly with
23 our partners, including bp Solar, and other solar
24 companies, and last week had a very significant
25 presence at PCBC the largest builder trade show in

1 San Francisco. And I think most of the people
2 that attended would say that solar was one of the
3 buzziest parts of the show. So I think we really
4 did a good job of getting awareness out there.

5 You know, I think that most of us would
6 agree that the results that we have seen to date
7 probably are not as nice or as what we had hoped
8 for. But the good news I'd like to share with the
9 Commission today is my company, Old Country
10 Roofing, is getting ready to submit two
11 applications for subdivisions, which we hope to do
12 in the next week. And hopefully many more over
13 the weeks to come.

14 Now, getting traction in the marketplace
15 has been very slow. And I just want to kind of
16 provide some feedback because this, I believe, the
17 right forum to do so.

18 First and foremost, I think everyone
19 recognizes that the market for new homes is not
20 exactly robust today. We have been seeing
21 builders drastically cutting back their spending
22 due to buildup of inventories and fierce price
23 competition among -- with other builders.

24 And in spite of a couple builders being
25 out there demonstrating that solar helps them sell

1 homes, the unfortunate thing is many builders are
2 actually cutting their prices and are very
3 resistant to adding any additional costs
4 whatsoever.

5 Second, there is a significant lack of
6 information and understanding about solar.
7 Builders are still learning about it, and how it
8 relates to energy efficiency. There are many of
9 us stakeholders that are actively spreading the
10 solar gospel. And we believe that, as the CEC's
11 public awareness campaign gets going, it's going
12 to really help a lot.

13 Pricing. We believe the incentives do
14 help and help a lot. In light of the market
15 conditions, however, and the fact that builders
16 are nervous about spending this extra money, one
17 of the things that I think we all have, at least
18 in the field we recognize, is that 10 cents per
19 Watt bonus incentive for builders that standardize
20 solar is not having much, if any, of an impact.

21 We are seeing the biggest adoption of
22 solar among production builders in nonCEC
23 territories, specifically SMUD and Roseville
24 Electric, where they are offering rebates of \$3
25 and \$4 a Watt respectively.

1 Now, obviously that ties into their rate
2 structure. But from a production builder's
3 perspective, it doesn't matter. It's just
4 offsetting that upfront cost.

5 So with regards to pricing and rebate
6 levels, I'm just going to throw this out there.
7 I'd like to propose that the Commission consider
8 increasing the rebate level for production
9 builders that are willing to commit to solar as a
10 standard feature.

11 I believe the impact that this would
12 have in getting this market segment going in the
13 right direction is significant.

14 I'm going to throw out one other idea to
15 think about, and it's in terms of the eligibility
16 requirements. One of the things that we're
17 running into is design issues, challenges because,
18 you know, obviously the biggest hurdle that we
19 face today is getting the builder to say, yes,
20 let's go solar. And there is nothing more
21 devastating for them to say, yes, let's go solar
22 and then find out it won't work on their project.

23 And that would be due to orientation
24 issues, chopped-up roofs, because they have not
25 designed these homes with solar in mind. They've

1 designed them to sell for floor layouts,
2 elevations and solar has not been part of the
3 architectural design criteria.

4 We are trying to reach out to
5 architects; and we have trained a number of them,
6 and continue -- and have presentations scheduled
7 with them. So there is a learning curve involved.

8 And as they start thinking about solar
9 more and more they will factor this into community
10 design and roof plans, and over time this issue, I
11 believe, will disappear.

12 Unfortunately, there's a long lead time
13 to develop these subdivisions. And you can launch
14 a new program and say you have to do this, but the
15 problem is plans have been in the works for a year
16 already; and there's another year before they're
17 ready. And sometimes it's too late to go back and
18 change. And we've seen this already.

19 So, and since we all have the goal of
20 getting things going in the right direction, one
21 slight modification I'd like the Commission to
22 think about is a modification to the California
23 flexible insulation requirements.

24 Both SMUD and Roseville Electric, I know
25 they have different peak loads, they allow

1 orientations to be between due-east and due-west.
2 Currently the CEC's -- the installation of
3 California flexible insulation requires it to be
4 between southeast and due-west. And that actually
5 does impact the feasibility for many homes that we
6 come into.

7 So at the risk of -- I mean I recognize
8 it's going to potentially have an impact on
9 reducing peak loads, which is one of the primary
10 drivers, I'd like to throw out the idea of
11 temporarily allowing a slightly wider range in
12 orientations to accommodate the lead time that we
13 need to catch up the architects to start planning
14 these communities more properly. Whether that's
15 six months or a year, I don't know. But obviously
16 it is in all of our best interests, and the
17 utilities' best interests to really focus on peak.
18 But I just don't think the markets are ready to
19 react that quickly to that.

20 So, that is it for my verbal comments.
21 We will be submitting written comments. And I
22 thank you.

23 ASSOCIATE MEMBER PFANNENSTIEL: Thank
24 you, Aaron. I think those are very thoughtful
25 comments and we will certainly think about clearly

1 those latter two, which are, as you know we
2 struggled with them in the original framework.

3 But we are wondering what's going on out
4 there so far. So, thank you for presenting that.

5 Tim, did you have a question?

6 MR. TUTT: Yeah, I do have a couple
7 questions, Aaron.

8 Does Old Country Roofing do any business
9 in say San Diego or other areas of the state where
10 under the performance calculator that we have
11 there would be a higher rebate than the sort of
12 list 2.50 in the guidebook?

13 MR. NITZKIN: We are not in southern
14 California. We go so far south as Bakersfield and
15 as far north as Redding. So we're covering a
16 little over half the state. And that's probably,
17 I think about four or five climate zones; I'm not
18 sure exactly how many of the climate zones. But.

19 MR. TUTT: So in the climate zones that
20 you cover maybe have you analyzed particular
21 circumstances that you're looking at and come up
22 with a higher rebate than the standard, do you
23 know?

24 MR. NITZKIN: We have not done that
25 analysis. We're really going based on getting the

1 word out and reacting when builders express
2 interest. And we do it on a case-by-case basis in
3 terms of the actual proposals. So.

4 MR. TUTT: Okay. With regard to your
5 second issue on design, and maybe on some east-
6 facing homes, familiar with analysis of I think
7 it's the Premiere Homes project in SMUD's service
8 territory where through -- where the consultants
9 indicated that it would be feasible, in many
10 cases, to -- whereas, you know, solar might fit on
11 the east-facing roofs, it's feasible to move it to
12 the south- or west-facing roofs of the
13 subdivision.

14 Are you really having a serious problem
15 with that? Have you seen that in plans, design
16 plans?

17 MR. NITZKIN: We are. When you think
18 about it, builders do not design homes so that you
19 can put an array on all four kind of quadrants of
20 the home. And in many cases there's only going to
21 be one or two quadrants where you can actually get
22 the array. And oftentimes they're opposite.

23 And so you have one direction or the
24 opposite direction. If that house happens to be
25 angled the wrong way, you're either getting

1 northeast or south -- you're either getting just
2 north of west or just south of east. And now
3 you're in an exception. And that's what we're
4 trying to minimize, is the number of exceptions
5 and the complications of getting the rebate.

6 We have to remember that builders don't
7 care about the details of this program. They
8 don't care about the complexity. They just want
9 to say how much per home, what is it going to cost
10 me per home across the board.

11 And it's our job to make it easy for
12 them. And the more variance that comes into the
13 picture, or the more we have to try to calm them
14 down and explain to them why, it's a challenge.

15 ASSOCIATE MEMBER PFANNENSTIEL: It is a
16 challenge. Thank you.

17 MR. NITZKIN: Thank you.

18 ASSOCIATE MEMBER PFANNENSTIEL: Ted
19 Bartacke.

20 MR. BARTACKE: Hi and good afternoon.
21 I'm Ted Bartacke with Global Green USA.

22 Speaking about the affordable housing
23 proposal today, I just first of all want to thank
24 the Commissioners and Staff and the members of the
25 affordable housing advisory committee who came

1 here today. but also the 12 or so who aren't
2 here, who put in lots and lots of time and effort.
3 And you all, sort of working through them, to sort
4 of work through our issues.

5 And really appreciate that. And to just
6 highlight our appreciation of the current and
7 continuing work beyond this on the utility
8 allowance issue. And we know that there are three
9 legs to make this work in affordable housing.

10 One is this program design and program
11 structure. Another is utility allowances. And
12 the third is the whole issue of metering. And
13 there's been some progress at the PUC recently on
14 the metering side of things.

15 So I just want to say that this is sort
16 of -- these three legs of this stool are starting
17 to come together and we're excited that the first
18 one is seeing the public day of light -- light of
19 day here.

20 In particular, we're very excited that
21 even the proposal is this dual rate for
22 residential and common because it recognizes the
23 two kinds of installations that in affordable
24 housing, and the need and the complexity that
25 powering units and costs implies. It also sort of

1 politically speaks to our desire to get PV
2 powering units, in general.

3 And I just, to that end I wanted to --
4 somewhere I have a picture here of yesterday, the
5 Solara, which is the first project in the state to
6 fully power the residential units in an affordable
7 housing project, opened -- had its grand opening
8 yesterday in Poway in north San Diego County; 141
9 kW of PV powering 56 residential units.

10 Just to give you an idea of how sort of
11 big of news this is, five of the six major tv
12 stations in San Diego covered the event, including
13 both Spanish language stations. We had long
14 articles in The Union Tribune. Reuters and AP are
15 both interested in writing a story about solar and
16 affordable housing the day that you all approved
17 this program at your business meeting. So,
18 there's some really sort of positive press being
19 generated by this.

20 The other thing to note about the Solara
21 was our involvement in the Solara was funded by
22 PIER. And it's been a nice dovetail with PIER
23 actually funding the research into a financial
24 model rather than into a building technology. And
25 that financial model panning out.

1 So, a little bit of maybe you can throw
2 some money Aaron's way, through PIER, to really
3 investigate some of these financial models for the
4 builder units.

5 But it shows that what PIER can do in
6 terms of research and its applicability to the
7 market is -- that that definition can be broadened
8 and help.

9 And to that end, several more projects
10 like this are coming down the pipe. We're working
11 on two more zero-energy affordable housing
12 projects that will apply in the next couple of
13 months as soon as this program gets rolled out.
14 And we're looking at this next round of TCAC as
15 having perhaps as many as 25 percent of the 9
16 percent applicants putting at least a common area
17 solar system on. So, we're very excited.

18 Now, specific comments on the
19 guidebooks. I just have sort of three sort of
20 nit-picks, and one major item.

21 The first is page 31, the regulatory
22 agreement issue about how affordable housing
23 developers can define themselves as an affordable
24 housing project. This has been one of the major
25 delays in administration in terms of getting an

1 accepted rebate reservation, is that these
2 regulatory agreements come in all shapes and
3 sizes; and we can't expect Energy Commission
4 Staff, or now program administrators to know what
5 they look like. They're affordable housing
6 agreements, they've got nothing to do with energy
7 or solar or utilities.

8 So we had proposed that there be a CEC
9 or program administrator form that said, this is
10 an affordable housing project that meets these
11 definitions as laid out in the guidebook. And
12 signed by a regulatory authority. It's not a
13 self-certifying agreement. And to that you would
14 attach your regulatory agreement.

15 But just in terms of program
16 administration it's been one of the things where
17 things don't get rejected, but we get asked for
18 more documentation when the documentation was
19 there, but you just didn't recognize it.

20 So we have all of the information that
21 we would want on that proposal and on that form,
22 and so we're looking to see if that form could be
23 generated. Or at least you could direct the
24 program administrators when it get transferred to
25 generate that form.

1 The second thing is on the maintenance
2 and monitoring agreement. I think there's a
3 little confusion here between, it says shall
4 provide a maintenance and monitoring plan. And
5 then the plan will be a contract.

6 And there was different views within the
7 committee about whether it should be a plan that
8 could be implemented by existing maintenance
9 staff, or had to be a contract with an outside
10 party. I think that confusion still exists. It
11 says the plan shall be a contract. And I think we
12 need to sort of figure out whether we want it to
13 be a plan or a contract. And state it upfront.

14 We would -- Global Green, not sort of
15 the advisory committee, but Global Green would
16 propose that it be a contract; but that contract
17 be potentially serviced through the overall
18 property management contract that affordable
19 housing developers will have with their property
20 management team. That it not necessarily be a,
21 you know, separate and additional. But we
22 definitely agree with the idea that it be a
23 contractual service agreement and not just a plan.

24 On the other ambiguity here it says that
25 the contract shall be for the life of the system.

1 And that's a vague term. What's the life of a
2 system. Is it the ten-year inverter warranty; is
3 it the 25-year panel warranty. It's vague.

4 And what we would propose is a 15-year
5 contract, because that's the life of the initial
6 financing package that an affordable housing
7 developer will have. And so at the end of 15
8 years, although it will remain affordable for a
9 long long time after that, there's a whole change
10 or there can be a change in ownership structure.
11 And those service contracts get renewed. And it
12 sort of provides a little bit longer than the
13 inverter, but a little bit less than the panels.
14 So we would suggest that that life of the system
15 be changed to 15 years.

16 And finally, it says shall include
17 scheduled annual or semi-annual. So, which is it?
18 And we would just say annual at a minimum; or at a
19 minimum, annual. Something like that.

20 The third item, the third sort of nit-
21 pick item is page 76 in the form. There's a new
22 NSHP-1 sort of revised form here. And item 5,
23 yes, the new item 5 asks you in this initial form
24 to provide the name and company of those who are
25 going to do the HERS testing on the home.

1 And we think that 30 months, 36 months
2 out from the process you don't know who that is.
3 You might, if you're a production builder and
4 you're working with a HERS rater over and over and
5 over again, but on a custom-designed project,
6 particularly a multifamily, you may not know who
7 that's going to be.

8 On a project that's four, five or six
9 stories, it's hard to find a HERS rater who's got
10 the expertise to do that kind of work. So, we're
11 just wondering what the utility of being asked to
12 provide that is. And that that not be a reason
13 that you would be declined from having a rebate
14 reservation accepted.

15 And then finally, the major issue, and
16 this may not be a major issue, but within the
17 affordable housing advisory committee we had quite
18 a bit of debate and divergence of opinion about
19 asking for a formal set-aside.

20 And we eventually chose not to. But
21 that, I think, probably among the unanimity was
22 the one that was one of the hardest for folks.

23 And I think we felt that it was okay to
24 not ask for the set-aside because there was this
25 separate volumetric trigger, which sort of put it

1 into a category where we wouldn't see incentives
2 declining in line with the market rate builders if
3 they started to out-strip it.

4 However, on page 30 there is this line
5 that says, these levels are subject to funding
6 availability. And I wonder -- the whole program
7 is subject to funding availability, and I wonder
8 why that needs to be stated for affordable housing
9 in particular.

10 I mean, it seems to me that should be
11 stated for the -- if that's the intention, it
12 should be stated for the mainstream program, too;
13 that these levels are -- and, in fact, you do, on
14 page 17, when you're talking about the mainstream
15 program, you know, when they're reduced the
16 corresponding resolve volume target for the new
17 incentive level may also be adjusted in order to
18 maintain the overall program's megawatt goals.

19 So, it's just working with affordable
20 housing developers they're always sort of subject
21 to funding availability. And it just sort of
22 causes some unease and heartburn about so, are
23 they available or not.

24 And I would -- I think we would be more
25 comfortable with just leaving what you already

1 have on page 30 at the bottom, which is at the
2 discretion of the Commission this process will
3 continue blah, blah, blah, blah, blah until the
4 realized volume has been reserved, or no funding
5 is available. Something that just doesn't set out
6 the affordable housing as subject to more
7 discretion or whims than the others.

8 You still, I think, have a bit of wiggle
9 room there in terms of changing these levels and
10 changing the volumetric targets, just like you do
11 in the mainstream thing.

12 And so that's all I'd like to say. But,
13 again, thank you. those are --

14 ASSOCIATE MEMBER PFANNENSTIEL: Thank
15 you, Ted, for those specific comments and
16 suggestions. I think they're helpful and we will
17 work on them.

18 But beyond that I want to thank you and
19 the whole affordable housing group and community
20 for working with us on this. It was very
21 important to us and we wanted to get it right.
22 And I know that we all put in a lot of hours. I
23 really appreciate the time commitment that you and
24 your colleagues on the advisory committee gave us.

25 And so I'm hoping we're moving on

1 towards getting it right, because we all have the
2 same goal on it. So, thank you very much.

3 MR. BARTACKE: Yeah, good. Here's
4 pictures of the Solara yesterday.

5 ASSOCIATE MEMBER PFANNENSTIEL: There we
6 go.

7 MR. BARTACKE: So, good. Thank you very
8 much. And we're around to answer questions if
9 they come up later. Thanks.

10 ASSOCIATE MEMBER PFANNENSTIEL: Great,
11 thanks.

12 The next blue card is Nehemiah Stone.

13 MR. STONE: Thank you. I'm with KEMA,
14 and in the interests of full disclosure I'd like
15 to state that we have a contract with the
16 Commission to work on the utility allowance tool.
17 And I'm not here representing anything about the
18 Commission on that. I'm part of the affordable
19 housing advisory committee, and my comments are
20 not to be interpreted as representing the
21 committee.

22 So these are comments from KEMA. Both
23 of them are not about the language. It's more
24 about some philosophical issues involved with
25 making the program a success.

1 And the first point is that initially
2 the language in the guidebook said that a mixed
3 use properties would not be able to be in. And,
4 you know, the advisory committee suggested that
5 that language be changed; and you changed it. And
6 we're all very appreciative of that.

7 There was another part of that, and this
8 is not specific to affordable housing, this is for
9 any multifamily that is part of a mixed use
10 project. The developers of these projects are not
11 going to find that it's economically feasible for
12 them to accept the hassle costs of going through
13 two different programs to get their rebates.

14 Now, with a lot of these projects there
15 won't be enough roof area to make it so it
16 justifies going to two programs, but there will be
17 for some of them. And if you make them go to the
18 CSI program for that portion that is
19 nonresidential and NSHP for that portion that's
20 residential, they're going to give up on one of
21 them. They're not going to do it.

22 And so the suggestion is that you work
23 together with the program administrators for CSI
24 to develop one application that can get them into
25 both programs, recognizing that the money will

1 have to come from the two different pots,
2 depending upon what is being served by the solar
3 system.

4 The second comment is actually a larger
5 comment that you hear, you know, I know you hear
6 it over and over. I heard it over and over when I
7 was here, but it's patent to this particular
8 issue.

9 And that is that the Commission has to
10 do a better job to make sure that the standards
11 are enforced. And that may seem like a strange
12 thing to say in this context, however when the
13 standards, one element of the standards that is
14 not particularly enforced in certain areas of the
15 state is the requirement for HERS raters to verify
16 particular equipment that is needed just to meet
17 compliance with the standards.

18 Since it's not enforced by the local
19 building departments, what happens then when
20 somebody wants to participate in the program, they
21 have to meet a 15-percent-better-than-the-
22 standards level for compliance, they recognize the
23 full cost of all of the HERS inspections as being
24 a cost of the program. They say, to heck with it,
25 we're not going to participate.

1 And this isn't just for the solar
2 program, it's also for the energy efficiency
3 programs that the utilities are running.

4 So, in the interest of making the
5 programs be more successful, I urge you to
6 identify those areas of the state where the
7 requirement for the standards in terms of
8 verification is not being met, and do some
9 training, do some outreach, maybe even, you know,
10 do some threatening.

11 Thank you.

12 ASSOCIATE MEMBER PFANNENSTIEL: Thank
13 you. We have been concerned about the enforcement
14 question and I'm glad that you raised it. Thank
15 you.

16 Mary Ellen Shay.

17 MS. SHAY: Good afternoon; my name is
18 Mary Ellen Shay; and it was my honor and privilege
19 to be the chair of the affordable housing advisory
20 committee. I'd like to echo Nehemiah and Ted's
21 thanks to you for giving us this opportunity to
22 bring our industry into the New Solar Homes
23 Initiative and program. It's such a thrill for us
24 to be this close.

25 And I want to compliment with all of my

1 heart Sandy and Diana, Bill Pennington, Bill --
2 forgot your last name -- Blackburn, and all of the
3 rest of the Energy Commission Staff. They've just
4 been fabulous.

5 We are also very interested in pursuing
6 the next steps to really get our program underway.
7 The next tax credit allocation round ends on July
8 12th. Ted said that we're expecting as many as 25
9 percent of the applications that go in to be
10 inclusive of a solar component. That's really
11 thrilling.

12 As much as I think we would like to have
13 a set-aside of some kind, I think affordable
14 housing is going to be in there first and early
15 and often. And we would certainly like to be able
16 to take advantage of all of all of the funding
17 opportunities that may be available.

18 We'd also like to offer our ongoing
19 assistance and participation. The task force
20 doesn't really want to disband until the work is
21 really done, and that means solving the utility
22 allowances, solving metering, solving long-term
23 management and maintenance. And a variety of
24 other things.

25 So I think that the advisory committee

1 does consist of 18 really hard-working, well-
2 intentioned people and they stand ready to
3 continue to serve.

4 Again, thank you, all, very very much
5 for giving us this chance.

6 ASSOCIATE MEMBER PFANNENSTIEL: Thank
7 you for those good words, but more than that,
8 thank you for your good works. You and the 17
9 other members of the advisory committee are why
10 we're at this point today.

11 And I agree with you, there's a lot more
12 work to be done. And we will count on you to help
13 us move forward. Thank you.

14 MS. SHAY: Perfect, thank you.

15 ASSOCIATE MEMBER PFANNENSTIEL: Sam
16 Vanderhoof.

17 MR. VANDERHOOF: Good afternoon. I've
18 been involved in the solar business for about 25
19 years. And one of the things that I've seen, this
20 is the first big opportunity our industry has seen
21 in a long time, in order to have a real successful
22 program.

23 And I'm talking about the CSI program,
24 the new home building program, and as well as some
25 of the other programs that are out there by the

1 munis.

2 I think we have -- it's an important
3 time right now in order to strategize and work
4 between all the different agencies to make this
5 program successful.

6 And I have a concern right now that the
7 program is so complicated, and that's the main
8 issue that I want to bring up. It's so
9 complicated it's hard for the customers to
10 understand it. It's hard for the dealers to
11 understand it. It's also hard for the
12 manufacturers to understand how the program works
13 and how they can be involved in it.

14 And there's a commitment level from all
15 these groups that are afraid to step forward. And
16 you can see right now from the programs, all the
17 programs are at a stall by -- except for some of
18 the commercial programs.

19 And what I want to do is encourage all
20 of us to work together and be able to come up with
21 some key guidelines, and to adjust the program so
22 that it works and meets some market needs.

23 And we all understand that there's been
24 a solar module shortage for a long time. That's
25 loosened up quite a bit now; now we have an

1 opportunity to be able to put in systems. But you
2 can see in California, it's at a stall point right
3 now. So I think being able to make these
4 adjustments now are really important.

5 The other thing, the program is too
6 complicated. It's also too risky for all the
7 individuals involved, the companies involved. And
8 it's too expensive. The payback is way too long.
9 So we need to look at these issues now and work
10 on the issues. And I think pull together, and
11 even committees separating out some of these
12 issues.

13 Because I think there's more than one
14 issue involved. There's probably a dozen issues
15 need to be addressed right now in order to get the
16 program back on track.

17 And then also, I think, as the CEC did
18 in the past, did a great job of making adjustments
19 to the program in order to keep it on track. And
20 I think that it's easy, with market changes, to
21 have the program kind of move away from what the
22 intent was. But I think bringing that back -- and
23 I think that's what this meeting is all about, is
24 to look at that and keep focused on what the
25 intent is, is to increase renewables in

1 California.

2 And I support that, and support your
3 efforts. Thank you.

4 ASSOCIATE MEMBER PFANNENSTIEL: Thank
5 you. If you have specific comments we'd really
6 appreciate hearing them on ways that we could
7 perhaps adjust the program to simplify it.

8 MR. VANDERHOOF: I think the speaker
9 that was just here before I think was great. In
10 order to -- all the programs are so different. In
11 order to get the programs so that they are much
12 more -- so it's clearer and they're much more
13 alike in a lot of ways.

14 You have to be an expert -- I spend a
15 lot of time these days with a lot of the
16 installers and some of the manufacturers. They
17 don't understand the programs. They're just too
18 many different programs for them to understand.

19 So they have to have either higher
20 experts in their company that are experts on the
21 different programs, which they get very frustrated
22 by it. And it's reflected in the amount of
23 rebates that are being applied for right now.

24 The industry is dead in the U.S. right
25 now. It's a bad time. When it's a time we should

1 be moving forward very quickly.

2 ASSOCIATE MEMBER PFANNENSTIEL: Thank
3 you.

4 MR. VANDERHOOF: Thanks.

5 ASSOCIATE MEMBER PFANNENSTIEL: Sue
6 Kateley.

7 MS. KATELEY: Hi, Commissioner
8 Pfannenstiel. I'm Sue Kateley; I'm representing
9 the California Solar Energy Industries --

10 ASSOCIATE MEMBER PFANNENSTIEL: Welcome
11 back.

12 MS. KATELEY: Yeah, thanks. Missed you
13 guys. I just want to make a couple of brief
14 comments. At the beginning of the guidebook it
15 says that the goal is to achieve 400 megawatts by
16 2016. And I might like to suggest that you put
17 some milestones in to see how you're progressing.

18 I mean obviously 19 homes so far isn't
19 going to get you there at that rate. So you might
20 want to put in some milestones to check in and see
21 how you're doing on that.

22 I'd like to suggest also if you could
23 find a way to work somewhere into the guidebook a
24 little, keep a window open, or a little bit of a
25 door open for solar thermal, solar waterheating.

1 We have a bill that we're working on
2 with Environment California, AB-1470, to create a
3 natural gas waterheater efficiency act, basically.
4 And I think it was the KEMA's energy study that
5 said that the real opportunities for reducing
6 natural gas consumption are in solar water
7 heating.

8 I think if that program, if that
9 legislation takes effect, there might be a nice
10 opportunity to move solar water heating into this
11 program. And so I'd like to ask that somehow we
12 find a way to indicate that that door could be
13 opened later on.

14 And then just by coincidence an
15 installer called me this morning and said, is
16 there anything you can do to help me on a problem
17 I have with the New Solar Homes Partnership. And
18 the story goes like this:

19 He has custom homes that were permitted
20 before January 1, 2007. And having him now bring
21 these homes up to current standards plus 15
22 percent, he says the homeowners are basically
23 saying forget about solar, we don't want to do it.

24 And I think that that's a special
25 circumstance for people who permitted, you know,

1 maybe a couple of years ago, before these programs
2 existed. There might be some, I don't know, I
3 don't have any solution here. But I'd love to try
4 to figure one out.

5 But there may be some real problems
6 there that may be opportunities to get more solar
7 out. Because right now they're basically saying,
8 forget about solar.

9 The other feedback I got again from the
10 same installer, so this is hardly statistically
11 relevant, but he said that the cost of getting the
12 compliance calculations done for his custom homes
13 are running \$1000 a home. And then the home
14 rating system cost is \$300 a home.

15 And when you're talking about a one-off
16 per-home custom home, the amortized cost is
17 probably okay in a production builder, but in a
18 custom home builder it's pretty high per home.
19 And it may be a barrier to implementation that I
20 don't know that you can necessarily deal with in
21 this round of the guidebook. But if you're
22 continuing to find no growth in the custom home
23 market, this is something that would be worth
24 investigating.

25 I just want to mention that I agree with

1 much of what Nehemiah said, who's disappeared now.
2 And especially on the mixed use projects. I think
3 that administratively both the CSI -- the CSI
4 program is an administrative nightmare for the
5 contractors. They're having a really bad time
6 with it.

7 Larger companies in the commercial
8 market, because they, again, have a bigger
9 project, it seems to be working better for them.

10 So I really agree with what Nehemiah was
11 saying about the hassle factors. I used to call
12 them transaction costs back in the '80s.

13 And then last, that's an incredibly
14 short comment period, which would force people who
15 might have more detailed comments, like me, to
16 give you, force me to do it in the context of a
17 business meeting.

18 And if you could -- since you might be
19 postponing this hearing by a little bit, if you
20 could just give me a -- the adoption hearing, if
21 you could just give me a couple more days, maybe I
22 could get some more, you know, serious comments
23 in.

24 ASSOCIATE MEMBER PFANNENSTIEL: Written
25 comments are due tomorrow. And was there a

1 specific reason that tomorrow was chosen for final
2 comments?

3 MR. SPEAKER: Friday (inaudible) --

4 (Laughter.)

5 MS. KATELEY: How generous.

6 ASSOCIATE MEMBER PFANNENSTIEL: I'm
7 wondering if there's a --

8 MS. KATELEY: Can I have the weekend?

9 ASSOCIATE MEMBER PFANNENSTIEL: Could we
10 do Monday, close of business Monday? I don't know
11 when the business meeting is going to be. I don't
12 think it's going to be July 11th. But, I don't
13 know what the business meeting will be for
14 adoption. Moving things around and scheduling
15 special business meetings and that kind of thing.

16 MS. KATELEY: I totally understand. It
17 just was -- if I could at least have till Monday
18 that'll help.

19 ASSOCIATE MEMBER PFANNENSTIEL: I would
20 like -- I think it is important to get all the
21 comments in. Bill, did you have --

22 MR. BLACKBURN: Yeah, this is Bill
23 Blackburn with the Energy Commission. The reason
24 why we had the short turnaround was we were really
25 trying to work with the affordable housing

1 community and realizing that they had a very tight
2 schedule. They had a July deadline there.

3 We were looking at potentially meeting
4 the June 27th, I think it is, business meeting.
5 So that's why we had the quick turnaround.

6 MS. KATELEY: But I thought Sandy's
7 presentation said the July 3rd business meeting.

8 MR. BLACKBURN: Right. So that we kind
9 of pushed back, and now we're kind of in limbo.

10 MS. KATELEY: And now you're looking at
11 a July 11th date? So maybe there is some room for
12 a couple of days more comment?

13 MR. BLACKBURN: Yeah, I think we --

14 ASSOCIATE MEMBER PFANNENSTIEL: It will
15 not be July 11th. I don't know what date it will
16 be.

17 Okay, we will --

18 MS. KATELEY: If you don't mind.

19 ASSOCIATE MEMBER PFANNENSTIEL: -- give
20 you till Monday, and then we'll squeeze, as
21 necessary.

22 MS. KATELEY: Okay, thanks. I just
23 don't want to do it at an adoption hearing if I
24 have to give detailed comments. Thank you very
25 much. And thanks for the welcome back.

1 ASSOCIATE MEMBER PFANNENSTIEL: Okay,
2 thank you.

3 Mark Johnson.

4 MR. JOHNSON: Good afternoon; I'm Mark
5 Johnson with Golden Sierra Power. I have a couple
6 questions regarding the actual guidebook.

7 I wasn't involved in the actual
8 committees, but some things that stood out,
9 especially within the changes here.

10 I'm a little wondering about this common
11 area being included. Because I was at a recent
12 meeting at PG&E where we were talking about multi-
13 use affordable housing large projects, and it
14 seems that what is being done, or has been done,
15 has been basically third-party ownerships going
16 into owners of these projects, offering to do the
17 common areas. The rents are already established.
18 The tenants aren't necessarily getting the
19 benefit.

20 And so I'm kind of wondering how this
21 whole affordable project, or without the
22 requirement of actually doing units, really helps
23 the tenant out, and is really the spirit of the
24 whole program.

25 Because it seems to me what you've done

1 is -- or what I'm looking at doing is creating
2 third-party ownerships and just go into apartment
3 complexes and offering to do the common areas.

4 And based on, you know, the definition
5 defines a primarily serving the residents, I'm
6 kind of like what doesn't in an apartment complex
7 serve the residents.

8 And so I'm kind of -- some of these
9 definitions that are out there seem to be somewhat
10 vague. Again, with the warranty issues. And so I
11 was wondering if maybe somebody could speak to a
12 couple of these issues.

13 MR. MILLER: I think the purpose in
14 adding that to the common area was to be more
15 consistent with affordable housing. Affordable
16 housing has common areas; it may be a clubhouse;
17 it could be some sort of rec room; there could be
18 parking that is for the tenants of affordable
19 housing. And so it seemed logical that if you're
20 going to the nonaffordable sector, multifamily,
21 that you would have some kind of common areas that
22 are for the -- primarily for the residents.

23 And so this is an area that we would
24 solicit comments for to try to tighten up the
25 language on common areas so that we don't fund

1 everything necessarily in a development that gets,
2 you know, maybe the definition gets stretched
3 beyond what you might think common area.

4 So, if you have some --

5 MR. JOHNSON: Well, for a participant --
6 well, I guess you still -- was there any
7 determination of what a benefit it would be to the
8 tenant to power the common areas? Even if it's an
9 affordable project, it's still investor-owned.
10 There's still an owner. And the only person, to
11 me, that's getting the benefit is either the
12 third-party ownership group or the -- and I'm just
13 bringing this up because these are models that I'm
14 actually looking at.

15 And so I just feel it's more important
16 to throw this stuff out there so that we don't get
17 down the road and people start scrambling around,
18 you know, looking at why things were done the way
19 they were done.

20 MR. MILLER: I think it's an area that
21 when we get to the final we will want to tighten
22 up the language so that we don't fund, you know,
23 have the definition too broad. So any comments
24 that you have on helping us define that, we'd
25 appreciate that.

1 MR. JOHNSON: Well, I guess -- if we
2 continue a little bit, because I wasn't involved
3 in the workshops, so I don't know if --

4 ASSOCIATE MEMBER PFANNENSTIEL: Mark, I
5 think you need to speak into the microphone--

6 MR. JOHNSON: I'm sorry.

7 ASSOCIATE MEMBER PFANNENSTIEL: -- we
8 want to get this recorded.

9 MR. JOHNSON: I wasn't involved in the
10 workshops so I wasn't sure if maybe this was
11 discussed. And it doesn't seem like it's being
12 communicated, to me. Or when I talk to PIAM or,
13 you know, doing my investigation here before I
14 came -- I mean I came down because I had these
15 conversations.

16 And the same issue with the warranty and
17 these maintenance contracts. I mean these were
18 issues that we dealt with when we were working
19 with the CSI. And it seems to me there's some
20 real enforcement questions here.

21 And when you spell out and put these
22 types of restraints in or requirements in, my
23 question then becomes who enforces this. And then
24 what is the penalty established. And, again, none
25 of that is being presented here in these programs.

1 ASSOCIATE MEMBER PFANNENSTIEL: So,
2 perhaps if you put those issues and your
3 recommendations for resolving them in comments,
4 then as we make our revisions to the guidebook
5 we'll certainly have to worry about those.

6 MR. JOHNSON: Okay. My next question --

7 ASSOCIATE MEMBER PFANNENSTIEL: Excuse
8 me, I don't think we can do --

9 MR. BARTACKE: Oh, okay.

10 ASSOCIATE MEMBER PFANNENSTIEL: Wait
11 till Mark finishes and then you can come back up.

12 MR. BARTACKE: Okay.

13 MR. JOHNSON: Well, if he has something
14 to say about what this topic --

15 ASSOCIATE MEMBER PFANNENSTIEL: Go
16 ahead.

17 MR. JOHNSON: I was going to change the
18 subject. I'm going to go to another subject.

19 ASSOCIATE MEMBER PFANNENSTIEL: Go
20 ahead.

21 MR. JOHNSON: Okay. Currently in the
22 PUC there's a motion filed by Golden Sierra Power
23 last year regarding bringing in the other four
24 IOUs. And I've been dealing directly with -- when
25 I say the other IOUs, the smaller IOUs -- I've

1 been dealing directly with one who actually has
2 two subdivisions going.

3 This utility could actually be
4 incorporated into PG&E territory in the next
5 several, couple years. But at the present time
6 we're working with developing its own program.

7 And so I'm wondering, I notice that Bear
8 Valley is included in this program. And I know
9 Bear Valley has been included with the CEC program
10 for a long time, as long as I've been involved
11 with this program.

12 And so I'm wondering how it would be to
13 incorporate some -- if within the next couple
14 weeks the PUC rules that these IOUs have to come
15 up with their own programs and participate, then
16 is there some way or mechanism that we can get
17 participation within this program?

18 I've got, like I said, two subdivisions
19 that could fall within this that are in the
20 process of being developed within one of these
21 IOUs.

22 ASSOCIATE MEMBER PFANNENSTIEL: Do they
23 contribute to the public goods charge?

24 MR. JOHNSON: The three of them do, one
25 doesn't because it's off-grid.

1 ASSOCIATE MEMBER PFANNENSTIEL: Well, if
2 they contribute to the public goods charge, and
3 they are otherwise included as investors --

4 MR. JOHNSON: Well, one of the things
5 that would be, I think, within this program,
6 they're not being charged for California's public
7 use charges, the public --

8 ASSOCIATE MEMBER PFANNENSTIEL: Well, --

9 MR. JOHNSON: I don't want to get
10 into --

11 ASSOCIATE MEMBER PFANNENSTIEL: Well, if
12 they're not contributing to the pot of money that
13 we're using for this program, then --

14 MR. JOHNSON: Right, okay. So then they
15 would have to --

16 ASSOCIATE MEMBER PFANNENSTIEL: -- might
17 be --

18 MR. JOHNSON: -- start contributing to
19 the --

20 ASSOCIATE MEMBER PFANNENSTIEL: Then
21 they would have to develop their own program.

22 MR. JOHNSON: Okay. Would you be
23 interested in administering -- that's what I was
24 getting to.

25 ASSOCIATE MEMBER PFANNENSTIEL: I think

1 that we're perhaps down the road. I think we're
2 not having the municipally owned utilities, the
3 publicly owned utilities incorporated in our
4 program for that same reason. They don't
5 contribute to the public goods charge, which is
6 the funding source that we're using.

7 So, we're working with them. And we are
8 hoping and encouraging them that they -- for them
9 to develop comparable programs, but we're not
10 administering their programs.

11 MR. JOHNSON: Okay. All right, I guess
12 we'll deal with that in other --

13 MR. MILLER: Chairman.

14 ASSOCIATE MEMBER PFANNENSTIEL: Sandy.

15 MR. MILLER: I think a clarification. I
16 think, Mark, you mentioned that Bear Valley
17 Electric doesn't contribute. It does contribute
18 to --

19 MR. JOHNSON: I said they do.

20 MR. MILLER: Yeah, okay, so they --

21 MR. JOHNSON: They've been participating
22 with you guys for --

23 MR. MILLER: Yeah, since probably 1998
24 they --

25 MR. JOHNSON: But I believe they're

1 falling under the umbrella of our motion, too.

2 They might be contributing to the CEC program, but

3 I don't think they're contributing to the CSI.

4 MR. MILLER: That's right.

5 MR. JOHNSON: And so that's what our

6 motion is getting them. Our motion was more based

7 on getting Sierra Pacific so that we could bring

8 solar to Lake Tahoe and the Basin.

9 All right, thank you.

10 ASSOCIATE MEMBER PFANNENSTIEL: Thank

11 you. And then, Ted, you had a comment?

12 MR. BARTACKE: Yes. I just wanted to

13 sort of get on the record what the benefit of

14 common area systems are to low-income housing

15 tenants, just because that question was in the

16 air.

17 There's a couple of direct benefits.

18 The first is that in building affordable housing

19 the main issue is first costs. And that has a lot

20 to do with how much you can raise in mortgage.

21 And how much you can raise in mortgage is directly

22 related to your operating costs.

23 And anything you can do to lower

24 operating costs increases the potential to build

25 affordable housing projects. We know of

1 situations where including solar and other energy
2 efficiency measures have directly been able to
3 increase the ability to build the units in the
4 first place.

5 So that, like the fact that the units
6 exist and that has something to do with their
7 energy efficiency and existence of renewables has
8 a good benefit for low-income families because
9 they've got more units to live in.

10 The second is that one of the ongoing
11 operating cost issues that low-income or
12 affordable housing faces is the requirement to
13 provide resident services. This includes computer
14 rooms, it includes English lessons, it includes
15 supervision of tot-lots. There's a lot of things
16 that they're required to provide as part of
17 ongoing operating costs.

18 Anything we can do to lower their energy
19 costs allows them to provide those services at a
20 high quality. So those are two direct benefits.

21 The final thing that was raised about
22 enforcement of maintenance and monitoring. Those
23 maintenance plans will have to be also submitted
24 to the California tax credit allocation committee
25 as part of the application to receive your funding

1 for low-income housing.

2 And so there is an enforcement
3 mechanism. Essentially if you don't comply with
4 all the contracts you sign, you are at risk of
5 losing your tax credit status and declaring
6 bankruptcy on that project.

7 So, there is a strong strong enforcement
8 mechanism for any contract that's signed. So I
9 just wanted to state those sort of things on the
10 record as benefits in enforcement. Thank you.

11 ASSOCIATE MEMBER PFANNENSTIEL: Thank
12 you. I appreciate that. Is there anybody else
13 who'd like to speak? That's all the blue cards I
14 have, but anybody else? You're welcome, just come
15 up to the podium and identify yourself for the
16 record.

17 MS. ANTHONY: I'm Juliette Anthony, and
18 I'm with Californians for Renewable Energy. I
19 also happen to be a member of the Marin
20 Environmental Affordable Housing Collaborative.

21 And I would like to say that as far as
22 common areas go, that if we could structure that
23 kind of contract, if it's going to be a third-
24 party contract, so that after a certain amount of
25 time the solar becomes part of the building,

1 itself, and is owned by the owners of the
2 building, that's the way the tenants in the long
3 run will get a much better value for their money.

4 If it's just owned by a third party,
5 they will get a break on the electricity, perhaps
6 10 percent lower than the going rate of either
7 PG&E or Southern California Edison or San Diego.
8 But if they have a long-term contract that can be
9 renewed and it never becomes part of the building,
10 ultimately the tenants don't get that extra.

11 And there are companies that do third-
12 party ownership which will structure their
13 contracts so that they are able to be turned over
14 for a reasonable rate at the end of a much shorter
15 contract to the building, itself.

16 Thank you.

17 ASSOCIATE MEMBER PFANNENSTIEL: Thanks.
18 Anybody else? Any other comments?

19 So we are now on a schedule where any
20 written comments will be submitted by close of
21 business Monday, June 11th. And we will then make
22 whatever revisions -- somebody on the phone? --
23 will make whatever revisions are indicated. And
24 get it on a Commission business meeting agenda as
25 soon as possible thereafter.

1 There is somebody on the phone who'd
2 like to speak?

3 MS. DIAZ: Sarah Diaz calling from
4 Sunlight and Power.

5 ASSOCIATE MEMBER PFANNENSTIEL: Yes, go
6 ahead.

7 MS. DIAZ: Thank you. I wanted to make
8 a comment about the maintenance agreements and --
9 section. The first thing I wanted to say is
10 having been in a -- our own solar PV installations
11 for nine years now, here in the Bay Area, I had
12 input from the head of our operations department
13 in photovoltaics about this was proposed and how
14 he suggested that it be carried out so that it can
15 meet the intention without burdening the
16 affordable housing owners with all the costs.

17 And the first thing was that it seems
18 like there are two aspects of the maintenance that
19 could be carried out pretty easily by someone
20 onsite that wouldn't need a lot of special
21 training or anything like that. Such as cleaning
22 the modules or monitoring the system.

23 We've been helping our clients monitor
24 the system for many years. And if they don't need
25 to -- you know, they can install say a web-based

1 monitoring system or something like that, if
2 they'd like to. But also, it's easy to maybe once
3 a month just write down the kilowatt hour output
4 of each of the inverters, and then -- we have a
5 lot of our clients who just (inaudible) inverters.
6 And you can see huge differences in the number of
7 kilowatt hours that are produced. And that's a
8 lot better of a tool for analyzing the system
9 performance and the instantaneous production which
10 was mentioned in the paragraph. Especially when
11 you're dealing with weather patterns and things
12 like that.

13 Really just keeping a log of what the
14 system is producing is how we do all of our
15 analyses for systems that may or may not be under-
16 producing.

17 The other thing is checking the
18 electrical connections. It's something that
19 really needs to be done by an electrician, which
20 is pretty costly and really unnecessary to be done
21 on a yearly basis, in our experience.

22 What we would like to pose, and what
23 really, I mean honestly, what Sunlight and Power
24 would like to propose for all installations, is
25 that the installer check the electrical

1 connections and retighten them after the first
2 summer that the system is producing. Because
3 there's a lot of, you know, heat and cool. And
4 usually the electrical connections need to be
5 tightened after the first summer that the system
6 is producing.

7 And then we recommend that once after
8 the first summer production and once again before
9 the ten-year installation warranty is over, maybe
10 around year seven, to check it. And that's really
11 all that's necessary as far as that goes --
12 production, in our experience.

13 And it would be really expensive and we
14 feel unnecessary burden on the client to be doing
15 that every year.

16 The last thing about the trees, having
17 trees trimmed that might be shading the array. I
18 find that to be really unnecessary. It shouldn't
19 even be included in the maintenance agreements
20 because this program is taking into account mature
21 tree height. That that is being dealt with at the
22 very front end of the program.

23 If there's concern about making sure
24 that the system output is matching what we thought
25 it was going to be in the beginning, I think

1 because we're taking into account the mature tree
2 height upfront, it's really unreasonable to then
3 expect, especially in a contractual form, to have
4 the affordable housing owners have to then pay for
5 what could be very costly tree trimming.

6 There's also the solar shade -- shade
7 control -- protect from trees being planted, you
8 know, in adjoining lots that might shade the
9 array. So I really feel like that's about as
10 unnecessary, and it could be interpreted in a very
11 economically burdensome manner.

12 So we just ran some quick numbers on how
13 much it would cost, say you were to -- if I were
14 to contract some -- to do all of these things. We
15 have a subcontract in (inaudible) to deal with the
16 tree situation, but the rest of it would roughly
17 cost for a 30 kilowatt system, -- schedule was
18 roughly 1500 kilowatt hour, the output of that
19 system is generally going to be about 6500 hours a
20 year worth of electricity, and if you had to have
21 this full maintenance twice a year, maybe two crew
22 members at a really low estimated like \$65 an hour
23 for an entire day for each of these.

24 The cost would be \$2080 for that one
25 year. You've already cut a third of the payback

1 of this system just in the maintenance
2 requirements, which is horrible impact on the
3 return. Which is already a difficult decision, at
4 least for our affordable housing clients.

5 And the best increase in efficiency you
6 can get for the clean modules in the one year
7 would be close to \$300, which doesn't come up to
8 offsetting the cost.

9 So, I'll be also sending written
10 comments, but my main concern I really wouldn't
11 want to start requiring some kind of formal
12 contract. I really feel like a plan shown that
13 they have what is their scheduled plan, and how do
14 they plan to clean the modules.

15 We also have an issue of they're usually
16 in the -- they get up on the roof and plan that at
17 the time you're constructing -- 30 kilowatt
18 system, it's like maybe 2000 square feet of
19 modules that need to be washed. And hauling a
20 bucket up there is not going to be real effective.

21 So, you know, what is their plan for
22 cleaning the modules. How often are they planning
23 to do that. And how do they plan to monitor the
24 system. Ask or, you know, suggest that they check
25 at least monthly and keep track of the production.

1 And then obviously work with their
2 installer who has (inaudible) installation for,
3 you know, if they see under-production. For the
4 testing electrical connections, I really feel like
5 that it shouldn't even be required by the
6 installers. Once after the first summer, and
7 again at the seventh year, -- before the
8 (inaudible) come and tighten those down, check all
9 the connections. And that the tree trimming be
10 completely eliminated from the equation.

11 ASSOCIATE MEMBER PFANNENSTIEL: Thank
12 you very much. And you'll be submitting written
13 comments?

14 MS. DIAZ: Yes.

15 ASSOCIATE MEMBER PFANNENSTIEL: We'll
16 appreciate them.

17 MS. DIAZ: All right, thank you.

18 ASSOCIATE MEMBER PFANNENSTIEL: Other
19 thoughts, other comments? Okay, well, we have our
20 schedule; we have our marching orders.

21 We'll be adjourned.

22 (Whereupon, at 3:26 p.m., the Committee
23 workshop was adjourned.)

24 --o0o--

CERTIFICATE OF REPORTER

I, PETER PETTY, an Electronic Reporter,
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I further certify that I am not of
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IN WITNESS WHEREOF, I have hereunto set
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